

ROTATIONAL COMPUTED TOMOGRAPHY SYSTEM AND METHOD

ABSTRACT OF THE DISCLOSURE

[0037] Geometries and configurations are provided for CT systems in which rotational loading is reduced, permitting higher speeds and lighter structures to be implemented in the systems. In certain embodiments a distributed and addressable rotating radiation source is provided with a rotating detector. In other embodiments a distributed and addressable stationary radiation source is provided with a rotating detector. In yet other embodiments a distributed and addressable radiation source is provided that rotates with respect to a stationary detector. The sources may be ring-like, arcuate and/or lines extending at least in the Z-direction. Sources may include a large number of distributed emitters arranged in lines, arcs and one- or two-dimensional arrays.